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CONTENTS

Discoveries and Current Events. — Palestine: Diseases of Ornamental Plants (*concluded*), p. 229.

Legislative and Administrative Measures. — Germany, p. 238. – Germany (Bavaria), p. 239. – Germany (Ostmark), p. 240. – Spain, p. 240. – United States of America, p. 240. – Italy, p. 241.

Recent Bibliography, p. 241.

IMPERIAL MYCOLOGICAL INSTITUTE JUL 1946

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1940

The reasons which motivated this initiative of the Institute are set forth in a Report by its Vice Preident M. J. Clyde Marquis, delegate of the U. S. A., which was submitted to the Permanent Committee of the Institute and sent to all the adhering Governments. The illustration of the Institute tasks in this extremely changing world, finds its basis in the results of the useful work which the Institute has accomplished in over 35 years of its existence, and also in the necessity felt the Governments to find in this world agricultural center some points of reference for their new economic policies.

Permanent Committee of the Institute. — The Permanent Committee will meet for its winter session on December 16. The Agenda deals with administrative and scientific activities of the Institute.

At this meeting, which as usual follows the meetings of the Committee on Finances and of the Committee on Publications, will be discussed a number of important questions referring to the Institute program of work mentioned above.

The next number of this Bulletin will contain a summary of the work of this meeting which will be attended by the representatives of the great majority of the adhering States.

The Institute Publications. — In spite of all difficulties, the activity of the Institute in the field of publications has continued normally during the current year.

The following periodical publications were issued regularly: (1) *International Yearbook of Agricultural Statistics 1939-40* — (2) *International Yearbook of Agricultural Legislation 1939* (in French only) — (3) *The World Agricultural Situation in 1938-39* — (4) *Farm Accountancy Statistics for 1936-37* — (5) *International Review of Agriculture* — (6) *Monthly Bulletin of Agricultural Economics and Sociology* — (7) *Monthly Crop Report and Agricultural Statistics* — (8) *Monthly Bulletin of Agricultural Science and Practice* — (9) *International Bulletin of Plant Protection* — (10) *Collection of Texts of Laws: year 1940* (in French only) — (11) *Bibliography of Tropical Agriculture 1939* — (12) *International Bibliography of Agricultural Economics. Special mention must be made of the new periodical publication issued under the title: International Bulletin of Agricultural Law.*

As regards other publications (non periodical), there has been no slowing down of the Institute activity. The volume on *World Trade in Agricultural Products* which contains a general survey of the evolution of world trade in agricultural products during the last ten years, has been widely distributed and was a great success. Towards the end of the year the volume on *Rubber 1935-1939* (*Economic and Technical Aspects*) will be ready for distribution and sale. This volume is the seventh of a series of surveys on the principal agricultural products on the world market under taken by the Institute. With the appearance of the fourth volume on the *Agricultural Institutions in the World*, the series will be completed. The first three volumes, which have been published already, deal with Europe (Vol. I and II) and North America (Vol. III). The fourth volume will deal with the countries of Central and South America, Asia, Africa and Oceania.

It can be stated that in 1940 the distribution of the Institute publications was wider than might have been expected if present circumstances, which seriously hamper international exchanges, are taken into account.

INTERNATIONAL BULLETIN
OF PLANT PROTECTION

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DISCOVERIES AND CURRENT EVENTS *

PALESTINE.

Diseases of Ornamental Plants (*concluded*) †

Laurus nobilis Linn.	*Alternaria* sp.	Leaf spot; black tip.
	Fusarium sp.	Blight; collar and root rot.
	Gloeosporium sp.	Associated with root rot.
	Phoma sp.	Associated with collar rot.
	Rhizoctonia sp.	Collar rot.
	Sclerotium bataticola Taub.	Root rot.
Leptospermum sp.	*Fusarium* sp.	Rot and sloughing off of bark.
	Rhizoctonia solani Kühn.	Collar rot.
Levisticum officinale Koch.	*Fusarium* sp.	Root rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Ligustrum lucidum Ait.	Leaf spot (non-parasitic).	
L. ovalifolium Hassk.	*Alternaria* sp.	Leaf spot.
Ligustrum sp.	*Fusarium* sp.	Collar rot.
	Rhizoctonia solani Kühn.	Root rot.
	Sclerotium bataticola Taub.	Collar and root rot.
	Leaf scorch (non-parasitic).	
	Leaf spot (non-parasitic).	
	Sunburn.	Twig.
	Cuscuta sp.	

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from the official correspondent of the Institute, Dr I. Reichert, Chief Plant Pathologist, Division of Plant Pathology, Agricultural Research Station, Rehovot, Palestine.

Lippia nodiflora Michx.	*Rhizoctonia solani* Kühn.	Root rot.
Lippia sp.	*Pythium* sp.	Root rot.
	Rhizoctonia solani Kühn.	Root rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Lonicera sp.	Leaf yellowing (non-parasitic).	
Magnolia grandiflora Linn.	*Fusarium* sp.	Root rot.
	Rhizoctonia solani Kühn.	Root rot.
	Black-tip of leaves (undetermined).	
Magnolia sp.	Black-tip of leaves (non-parasitic).	
	Leaf drop (non-parasitic).	
	Leaf scorch (non-parasitic)	
	Leaf spot (non-parasitic).	
Mammillaria elegans DC. var. *supertexta*.	*Fusarium* sp.	Collar rot.
M. scolymoides Scheidw.	*Bacterium* sp.	Brown collar rot.
	Fusarium sp.	Brown collar rot.
M. uncinata Zucc.	*Fusarium* sp.	Wilt.
Mammillaria sp.	*Fusarium* sp.	Collar rot.
Matthiola sp.	*Cladosporium* sp.	Leaf spot.
	Fusarium sp.	Collar rot; collar and root rot.
	Leaf drying (non-parasitic).	
	Yellowing and leaf spot (non-parasitic).	
	Heterodera marioni (Cornu) Goodey.	Root knot.
Melaleuca armillaris Smith.	*Sclerotium bataticola* Taub.	Root rot.
Melia azedarach Linn.	*Bacterium tumefaciens* EFS. et Town.	Crown gall.
	Wither-tip (non-parasitic).	
Mesembryanthemum aciniaciforme Linn.	*Heterodera marioni* (Cornu) Goodey.	Root knot.

Mesembryanthemum cordifolium Linn. var. *variegatum.*	*Fusarium* sp.	Root rot.
	Rhizoctonia solani Kühn.	Root rot.
Mesembryanthemum sp.	*Fusarium* sp.	Bark rot of stem.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Myrtus communis Linn.	*Bacterium tumefaciens* EFS. et Town.	Crown gall.
	Cercospora sp.	Leaf spot.
	Fusarium sp.	Root rot, wilt, damping off.
	Oidium sp.	Mildew.
	Sclerotium bataticola Taub.	Wilt and root rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Narcissus sp.	Leaf scorch (non-parasitic).	
Nemesia sp.	*Fusarium* sp.	Root rot.
	Rhizoctonia solani Kühn.	Rot rot.
	Sclerotium bataticola Taub.	Root rot.
Obergonia sp.	*Fusarium* sp.	Collar and root rot.
Opuntia ficus-indica Mill.	*Phyllosticta* sp.	Leaf spot.
O. leucotricha DC.	*Bacterium* sp.	Black collar rot.
	Fusarium sp.	Root rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
O. rafinesquii Engelm.	*Bacterium* sp.	Collar rot.
Opuntia sp.	*Bacterium* sp.	Associated with collar rot.
	Fusarium sp.	Collar rot.
Oreodoxa oleracea Mart.	*Fusarium* sp.	Seed rot.
	Melanospora sp.	Associated with seed rot.
Pandanus utilis Bory.	*Cladosporium* sp.	Leaf spot.
	Fusarium sp.	Leaf rot; collar rot.
	Leaf scorch.	Wind injury.
Parkinsonia aculeata Linn.	*Rhizoctonia solani* Kühn.	Damping off.
	Wither-tip (non-parasitic).	

Passiflora edulis Sims.	Bark brownishing (undetermined).	Twigs.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Passiflora sp.	*Oidiopsis* sp.	Powdery mildew.
	Peronospora sp.	Downy mildew.
	Aucuba mosaic (? virus).	
	Mosaic (? virus).	
	Heterodera marioni (Cornu) Goodey.	Root knot.
Paulownia imperialis Sieb. et Zucc.	*Fusarium* sp.	Damping off.
	Sclerotium bataticola Taub.	Damping off.
Peireskia sp.	*Fusarium* sp.	Root disintegration and rot.
	Black leaf spot (non-parasitic).	
Pelargonium sp.	*Alternaria* sp.	Leaf spot.
	Sclerotium bataticola Taub.	Root rot.
Petunia sp.	*Oidium* sp.	Powdery mildew.
	Pythium sp.	Soft rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Phacelia tanacetifolia Benth.	*Sclerotium bataticola* Taub.	Collar rot.
Phlox drummondi Hook.	*Fusarium* sp.	Root rot.
	Septoria sp.	Leaf spot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Phoenix canariensis Hort.	*Alternaria* sp.	Leaf spot.
	Fusarium sp.	Root rot.
	Graphiola phoenicis (Mong.) Poit.	False smut.
P. tenuis Versch.	*Fusarium* sp.	Seed rot.
	Melanospora sp.	Associated with seed rot.
Phoenix sp.	*Fusarium* sp.	Wilt; black tip.
	Graphiola phoenicis (Mong.) Poit.	False smut.
Pinus canariensis C. Smith.	*Fusarium* sp.	Damping off.

Pinus halepensis Mill.	*Alternaria* sp.	Associated with root rot; sooty mould.
	Cladosporium sp.	Sooty mould.
	Fusarium sp.	Damping off; wilt; collar and root rot.
	Phoma sp.	Associated with wilt; drying.
	Rhizoctonia solani Kühn.	Damping off; wilt; collar and root rot.
	Sclerotium bataticola Taub.	Collar and root rot; damping off.
	Needle spot (undetermined).	
	Die-back (undetermined).	Branches, twigs, needles.
P. maritima Poir.	*Fusarium* sp.	Root rot; damping off.
	Sclerotium bataticola Taub.	Root rot.
P. pinaster Ait.	*Fusarium* sp.	Damping off.
P. pinea Linn.	*Fusarium* sp.	Damping off.
	Sclerotinia minor Jagger.	Damping off.
P. radiata Don.	*Fusarium* sp.	Damping off.
Pistacia vera Linn.	Black gum spot and vein blackening (non-parasitic).	
	Spongeous root rot (undetermined).	
Pistacia sp.	*Fusarium* sp.	Damping off.
	Rhizoctonia solani Kühn.	Damping off.
	Black tip (non-parasitic).	
Pittosporum tobira Ait.	*Fusarium* sp.	Root rot; damping off; collar and root rot.
	Sclerotium bataticola Taub.	Root rot; damping off; collar and root rot.
	Hail spot (non-parasitic).	
	Leaf scorch (non-parasitic).	
	Leaf discoloration (non-parasitic).	
P. undulatum Vent.	*Fusarium* sp.	Damping off.
	Phoma sp.	Leaf spot.
	Sclerotium bataticola Taub.	Damping off.
	Gum spot (undetermined).	Leaf.

Platanus occidentalis Linn.	*Cladosporium* sp.	Sooty mould on leaves.
Plumbago capensis Thunb.	*Alternaria* sp.	Wither-tip and leaf drying.
	Fusarium sp.	Root rot.
	Phoma sp.	Wither-tip and leaf drying.
	Gum spot (non-parasitic).	Twig.
	Leaf dry spot (non-parasitic).	
	Wither-tip (non-parasitic).	
Plumeria alba Linn.	*Alternaria* sp.	Leaf spot.
	Phyllosticta sp.	Leaf spot.
Poinciana regia Boj.	*Fusarium equiseti* (Corda) Sacc.	Collar rot.
	Fusarium sp.	Trunk, collar and root rot.
	Oidium sp.	Powdery mildew.
	Pleospora sp.	On stem.
	Sclerotium bataticola Taub.	Collar and root rot.
	Brown spot (non-parasitic).	Twig.
	Yellow leaf spot (? virus).	
Polianthes tuberosa Linn.	*Fusarium* sp.	Wilt, root rot, collar rot.
	Rhizoctonia solani Kühn.	Collar and root rot; wilt.
Populus sp.	*Coniothecium complanatum* (Nees) Sacc.	Black stem spot.
	Melampsora larici-populina Kleb.	Rust.
	Sclerotium bataticola Taub.	Collar and root rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Portulaca oleracea Linn.	*Albugo candida* (Pers.) Ktz.	White rust.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Pycnostachys dawei ana N. E. Br.	*Fusarium* sp.	Root rot.

Quercus sp.	*Fusarium* sp.	Collar and root rot.
	Ganoderma sp.	Root disintegration.
	Phyllactinia corylea (Pers.) Karst.	Mildew on leaves.
Reseda odorata Linn.	*Cercospora resedae* Fckl.	Leaf spot.
	Fusarium sp.	Root rot.
Ricinus communis Linn.	*Cercospora* sp.	Leaf spot.
	Septoria sp.	Leaf spot.
	Uredo ricini Biv.-Berm.	Rust.
	Browning and yellowing of leaves (undetermined).	
	Yellow leaf spot (undetermined).	
	Cuscuta monogyna Vahl.	
Robinia pseud-acacia Linn.	*Fusarium* sp.	Damping off.
	Rhizoctonia solani Kühn.	Damping off.
	Gum spots on upper leaf surface (non-parasitic).	
Rosa canina Linn.	*Phragmidium* sp.	Rust.
	Sphaerotheca pannosa (Wallr.) Lév.	Mildew.
R. indica Lindl.	*Bacterium tumefaciens* EFS. et Town.	Crown gall.
	Fusarium sp.	Root rot.
R. laxa Retz.	*Phragmidium mucronatum* Schlecht.	Rust.
Rosa sp.	*Ascochyta rosicola* Sacc.	Brown leaf spot.
	Bacterium tumefaciens EFS. et Town.	Crown gall.
	Bacterium sp.	Shrivelling of stem.
	Botrytis sp.	Brown twig spot.
	Cercospora rosicola Pass.	Leaf spot.
	Diplodia sp.	Collar and root rot.
	Fusarium sp.	Associated with *Rhizoctonia solani* and *Sclerotium bataticola*; collar and root rot, wilt.
	Pestalozzia sp.	Leaf spot.
	Phoma sp.	Root rot.
	Phragmidium subcorticium (Schr.) Wint.	Rust.

Rosa sp. (*continued*).	*Pleospora* sp.	Leaf and stem blight.
	Rhizoctonia solani Kühn.	Collar and root rot.
	Sclerotium bataticola Taub.	Collar and root rot.
	Sphaerotheca pannosa (Walr.) Lév.	Mildew.
	Black-tip (non-parasitic).	
	Wither-tip (non-parasitic).	
	Yellowing of leaves (non-parasitic).	
	Cuscuta sp.	
Rosmarinus officinalis Linn.	*Alternaria* sp.	Associated with total drying of plants.
	Basidiomycetes.	Associated with *Rhizoctonia solani*; collar and root rot.
	Fusarium sp.	Collar and root rot; wilt.
	Pestalozzia sp.	Associated with total drying of plants; blackening of leaves.
	Phytophthora sp.	Root rot.
	Rhizoctonia solani Kühn.	Collar and root rot.
	Sclerotium bataticola Taub.	Total blight; root rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.
Russelia juncea Zucc.	*Fusarium* sp.	Collar and root rot.
	Rhizoctonia solani Kühn.	
	Rhizoctonia bataticola Taub.	Collar and root rot.
Sabal ghiesbrechtii Hort.	Yellow transparent leaf spot (undetermined).	
Salvia splendens Ker.-Gawl.	Nematode (undetermined).	On leaves.
S. triloba.	*Heterodera marioni* (Cornu) *Goodey*.	Root knot.
Sambucus sp.	*Cercospora* sp.	Leaf spot.
Schinus terebinthifolius Raddi.	Drying of leaves (non-parasitic).	
Sedum sp.	White dry leaf spots (non-parasitic).	
Sequoia gigantea DC.	*Fusarium* sp.	Damping off.

Spiraea fortunei Planch.	*Fusarium* sp.	Root rot.
	Sclerotium bataticola Taub.	Root rot.
Statice sp.	*Cercospora* sp.	Leaf and stem spot.
	Oidium sp.	Mildew.
Stillingia sebifera Michx.	*Heterodera marioni* (Cornu) Goodey.	Root knot.
Styrax sp.	*Fusarium* sp.	Wilt.
	Phoma sp.	Wilt.
	Sclerotium bataticola Taub.	Wilt.
Syringa vulgaris Linn.	*Fusarium* sp.	Collar rot.
	Gum leaf spot (non-parasitic).	
	Leaf spot (undetermined).	
Tephrosia candida DC.	*Fusarium* sp.	Collar and root rot.
	Rhizoctonia solani Kühn.	Collar and root rot.
	Sclerotium bataticola Taub.	Collar and root rot.
Thuja sp.	*Fusarium* sp.	Damping off, root rot.
	Phoma sp.	Blight.
	Sclerotium bataticola Taub.	Collar and root rot.
Trachycarpus excelsa H. Wendl.	*Fusarium* sp.	Root rot.
Tropaeolum majus Linn.	*Oidiopsis* sp.	Powdery mildew.
Verbena sp.	Black-tip (non-parasitic).	
	Wither-tip (non-parasitic).	
	Heterodera marioni (Cornu) Goodey.	Root knot.
Viburnum lucidum Mill.	Leaf spot (non-parasitic).	
Vinca minor Linn.	*Rhizoctonia solani* Kühn.	Collar and root rot.
	Dry leaf spot (undetermined).	
	Heterodera marioni (Cornu) Goodey.	Root knot.
Viola odorata Linn.	*Cercospora violae* Sacc.	Leaf spot.
	Phyllosticta sp.	Leaf spot.
	Sclerotium bataticola Taub.	Wilt.
	Heterodera marioni (Cornu) Goodey.	Root knot.
V. tricolor Linn.	*Fusarium* sp.	Rot.
	Heterodera marioni (Cornu) Goodey.	Root knot.

Washingtonia sp.	*Diplodia* sp.	Heart rot.
	Fusarium sp.	Heart and root rot.
	Leptosphaeria sp.	Leaf spot.
	Phoma sp.	Associated with heart rot.
	Phyllosticta cocoina Cooke.	Leaf spot.
	Phytophthora sp.	Heart rot, root rot.
	Rhizoctonia solani Kühn.	Root rot.
	Septoria sp.	Leaf spot.
	Brownish leaf spot (non-parasitic).	
	Transparent yellow leaf spot (undetermined).	
	Heterodera marioni (Cornu) Goodey.	Root knot.
Zinnia elegans Jacq.	*Alternaria* sp.	Leaf spot, blackening.
	Fusarium sp.	Collar and root rot.
	Oidium sp.	Powdery mildew.
	Rhizoctonia solani Kühn.	Collar rot.
	Leaf spot (undetermined).	
	Heterodera marioni (Cornu) Goodey.	Root knot.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Germany. — A Circular of April 8, 1940 establishes the measures to be taken with a view to checking the damage caused by rabbits.

Although in some districts rabbits were completely exterminated through the exceptional cold of last winter, there are still some parts where these rodents are rampant, chiefly near large towns where valuable garden crops are damaged.

Those concerned are referred to the Game Law [see this *Bulletin*, 1934, No. 8, p. 181, and 1935, No. 6, p. 132] which authorizes proprietors of enclosed lands to kill any rabbits found on their grounds provided that the said proprietors have obtained a permit to that effect from the authorities in charge. This permit is now given to all proprietors and occupiers of enclosed land, application for same being unnecessary. The use of snares and poison bait, however, for the destruction of rabbits is prohibited. A written permit from the local authorities is required for the use of guns. Persons without a shooting licence may also be authorized to shoot rabbits, the presence of the proprietors of the land involved not being necessary.

Dead leaves, twigs, compost, etc. should be heaped onto some sort of grating raised from the ground so as to leave a space, thus depriving the rabbits of their favorite shelter. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1, September 1940, Bd. XII, Nr. 5, S. 99-100).

*** A Notification of August 24, 1940 relative to the modifications brought into force by Ordinance of October 8, 1937 [see this *Bulletin*, 1938, No. 2, pp. 28-29] regarding the control of the potato wart disease [*Synchytrium endobioticum*] states that the varieties 'Allerfrüheste Gelbe' and 'Centifolia' non-resistant to wart disease, which were authorized for cultivation in 1941 by Amendment of March 26, 1940 to the aforesaid Ordinance [see this *Bulletin*, 1940, No. 9, p. 165] may also be cultivated in 1942. Seedlings of these varieties may be sold up to July 1, 1942. (*Ibid.*, S. 97-98).

*** The former Free City of Danzig being, by virtue of the Law, dated September 1, 1939, incorporated in the Reich, all legislative regulations, including phytosanitary measures [see this *Bulletin*, 1935, No. 2, p. 37; No. 6, pp. 135-136; No. 11, p. 252; 1936, No. 10, p. 222] taken previous to this date have been abrogated. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin, Anfang September 1940, 20. Jahrg., Nr. 9, S. 56).

*** As the customs frontier between Germany and the Protectorate of Bohemia and Moravia was abolished on October 1, 1940, the Minister of Agriculture by Order of September 25, 1940, has established that nursery plants (ornamental and deciduous fruit trees) from the Protectorate and intended for import into Germany, must be disinfected and accompanied by an official certificate testifying that they have been treated with toxic gas.

The importation of vines from the Protectorate remains prohibited.

The abolition of the former customs frontier entails the abolition of all other phytosanitary prescriptions and restrictions.

Consignments from abroad arriving at the frontier of the Protectorate and intended for dispatch to German customs territory will be examined by the Plant Inspection Service of the Protectorate with effect for the entire German customs territory. (*Ibid.*, Anfang Oktober 1940, Nr. 10, S. 68).

Germany (Bavaria). — By Decree of July 25, 1940, the occupiers of farm lands are required to carry out control measures against sparrows when, by request of the district Plant Protection Service, the administrative authorities declare control compulsory and delimit the areas wherein the measures in question are to be carried out. Control should be effected according to the instructions of the Plant Protection Service. The administrative authorities may commission an officer of the Plant Protection Service to supervise the necessary control operations, costs being paid by the land owners or occupiers.

Children under 14 are not to be employed in capturing sparrows and destroying their nests. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. September 1940, Bd. XII, Nr. 5, S. 100).

*** A Notification of the same date establishes that the organization and supervision of sparrow control as also the measures to be adopted are incumbent on the Plant Protection Service. (*Ibid.*, S. 101).

Germany (Ostmark). — Published on July 20 and August 7, 1940 respectively, new regulations—based on the Decree of November 21, 1939 relative to the control of the San José scale [*Aspidiotus perniciosus*: see this *Bulletin*, 1940, No. 5, p. 103] — establish the measures to be observed firstly, in the disinfection of nursery plants by toxic gas, and secondly, in the supervision of nurseries in former Austria. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. September 1940, Bd. XII, Nr. 5, S. 101-104).

Spain. — A Decree of August 13, 1940 reorganizes the Plant Protection Service now known as the ' Servicio de Fitopatología y Plagas del Campo '.

Research work and experiments are carried out by the Stations (' Estaciones de Fitopatología Agrícola ') under the direction of the Institute of Agricultural Research.

All other work (phytopathological inspection and control, supervision of the trade in and manufacture of insecticides and fungicides, demonstration and propaganda work, execution of control operations, etc.) is entrusted to the ' Secciones de Fitopatología y Plagas del Campo ' of the provincial ' Jefaturas de Agricultura ' under the direct supervision of Section III of the Department of Agriculture. The Chief of Section III is also Chief of the Service.

The inland, port and frontier phytosanitary stations are also under the direct supervision of the aforesaid Section III. These stations carry out disinfection and other treatments of plants and agricultural products which are used either for national or international purposes, as well as phytopathological inspection at the ports or frontiers designated by the Ministry of Agriculture, independently of any other examination to which the plants or products may have been subjected before their entry into or egress from Spain.

The authorities and farmers are required to report all crop parasites found, in particular the ' plagas de calamidad pública ' and those the control of which is of national interest and importance. In this case, the State will contribute towards the expenses involved in control operations. (*Boletín Oficial del Estado*, Madrid, 4 de septiembre de 1940, año V, núm. 248, págs. 6175 a 6178).

*** In view of the presence of the yellow stalk borer (*Sesamia vuteria*) in Andalusia, an ' orden ' of September 5, 1940 states that all stalks of maize, millet and sorghum must be uprooted and burnt before November 1, 1940. (*Ibid.*, 11 de septiembre de 1940, núm. 255, pág. 6330).

United States of America. — Amendment No. 2 to the rules and regulations (seventeenth revision) supplemental to Notice of Quarantine No. 48 on account of the Japanese beetle [*Popillia japonica*], approved on April 4, 1940

and effective on April 5, 1940, concerns the revision of regulations 3, 5, and 6 and the reprinting of regulations 7 and 9 [see also this *Bulletin* 1940, No. 1, p. 10]. (*B. E. P. Q. – Q. 48*, [Washington, D. C.], 1940, 9 pp.).

Italy. — Ministerial Decree of August 14, 1940 authorizes hunting and capture of rooks, hooded crows, jackdaws, jays, shrikes and bee-eaters (the latter only in the proximity of bee-hives), declared pests, in the Province of Sassari. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 30 agosto 1940, anno 81°, n. 203, pp. 3222-3223).

RECENT BIBLIOGRAPHY

AGATI, Julian A., and DE PERALTA, Fernando. Rice *cadang-cadang* in Albay Province: II. Fertilizer treatments. *The Philippine Journal of Agriculture*, Manila, 1939, Vol. 10, No. 3, pp. 271-283. Literature cited, p. 283.
[This disorder of rice is largely the result of plant food deficiency in the soil, particularly nitrogen].

ANET, H. La défense des cultures contre les dommages du gel en Valais, en 1938 et 1939. *Revue Horticole Suisse*, Châtelaine-Genève, 1939, XII^e année, n° 10, p. 220-221, 1 fig.; n° 11, p. [241]-243.

ARNOLD, H. C. Pyrethrum. *The Rhodesia Agricultural Journal*, Salisbury, 1939, Vol. XXXVI, No. 10, pp. 732-739.
[*Chrysanthemum cinerariaefolium*].

ASKEW, H. O., and WILLIAMS, W. R. Lloyd. Brown-spotting of apricots, a boron-deficiency disease. *The New Zealand Journal of Science and Technology*, Wellington, N. Z., 1939, Vol. XXI, No. 2 A, pp. 103 A-106 A, fig. 1. References, p. 106 A.

ATTIA, Rizk, & MATTAR, Bishara. Some notes on " the potato tuber moth " (Phthorimaea operculella, Zell.). *Ministry of Agriculture, Egypt. Technical and Scientific Service. Entomological Section. Bulletin No. 216*, Cairo, 1939, 136 pp., 41 figs. Literature as recorded by the Review of Applied Entomology, pp. 115-136.

AYERS, G. W., and HURST, R. R. Verticillium wilt of potatoes in Prince Edward Island. *Scientific Agriculture*, Ottawa, Canada, 1939, Vol. XIX, No. 12, pp. 722-735, figs. 1-9. References, p. 735.
[*Verticillium albo-atrum*].

BABARAN, José M. Pasture weeds and cost of removing them by cutting. *The Philippine Agriculturist*, Laguna, P. I., 1939, Vol. XXVIII, No. 6, pp. 504-520. Literature cited, p. 519.

BALBACH, Hans. Untersuchungen über die Reisigkrankheit der Weinrebe. 2. Mitteilung: Der stoffliche Aufbau der Zellstäbe, mit besonderer Berücksichtigung des Zentralfadens. *Wein und Rebe*, Mainz 1939, 21. Jahrg., Nr. 10/11, S. 318-340, Abb. 1-12. Literaturverzeichnis, S. 339.
[With title and summary also in Italian:— ' Ricerche sull'arricciamento della vite. Comunicazione II: Sulle sostanze costituenti i cordoni endocellulari con particolare riguardo al cordone centrale '].

BALDWIN, Henry I. The European spruce sawfly in New Hampshire 1938. *Journal of Forestry*, Washington, D. C., 1939, Vol. 37, No. 11, pp. 876-878.
[*Diprion polytomum*].

BANU, C. Un dușman al semincerilor de tutun: larva fluturelui Heliothis obsoleta F. *Buletinul culturării și fermentarii Tutunului*, București-Băneasa 1939, an. XXVIII, nr. 3, pag. 344-350, fig. 1-5. Bibliografie, pag. 350.

BELLIO, G. Esperimenti di lotta invernale con anidride solforosa contro la cocciniglia cotonosa (*Pseudococcus citri*) sulla vite. *Annali della Facoltà di Agraria della R. Università di Napoli*, Portici, 1940, ser. III, vol. XII (1941), pp. [207]-240, figg. 1-6, tav. I-IV. Bibliografia, p. 239.

BENLLOCH MARTÍNEZ, Miguel. Notas sobre *Aglaope infausta* L. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n.os 31, 32, 33 y 34, págs. [1] a 6, figs. 1-4.

BENLLOCH [MARTÍNEZ], Miguel, y DOMINGUEZ, Francisco. La lucha contra la mosca de las cerezas, *Rhagoletis cerasi* (L.) Loew. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n.os 31, 32, 33 y 34, págs. 7 a 14, figs. 1-3. Bibliografía, pág. 14.

BESHIR, M., and HOSNY, M. Some mealy bugs of Egypt and experiments on their control by means of chemicals. *Ministry of Agriculture, Egypt. Technical and Scientific Service. Entomological Section. Bulletin No. 209*, Cairo, 1939, 16 pp. References, p. 16.
[*Phenacoccus hirsutus, Pseudococcus citri, Ps. filamentosus, Ps. sacchari, Icerya aegyptiaca, I. purchasi*].

BEST, Rupert J. Plant viruses. The influence of recent knowledge on methods for their control. *The Journal of the Australian Institute of Agricultural Science*, Sydney, 1939, Vol. 5, No. 3, pp. 162-168.

BIRAGHI, A[ntonio]. Un marciume della lattuga prodotto da " Pythium ". *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 119-124, fig. 1, tav. VI.

BLUNCK, H. Die Rapsglanzkäferschäden. *Mitteilungen für die Landwirtschaft*, Berlin 1940, 55. Jahrg., Heft 30, S. [533]-535, Abb. 1-13; Heft 31, S. 561.
[*Meligethes aeneus*].

BOGATOVA, Z. K. Toxicity of rotenone bearing Tephrosia. *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 14, pp. 1-[14]. [Bibliography], p. [14].
[In Russian, with title also in English].

BOHORQUEZ, Rafael. Experiencias de lucha contra la mosca del olivo (*Dacus oleae* Rossi) por medio de substancias atractivas. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 125 a 139, 9 gráficos.

BOIS, Eric-J. Les rosiers et leur résistance aux maladies qui les atteignent. *Revue Horticole Suisse*, Châtelaine-Genève, 1939, XII[e] année, n° 11, p. 247-250.

BORZINI, G[iovanni]. Sulle cause di una moria di piante di vite. *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 137-146, figg. 1-6.
[These investigations point to a physiological disharmony between stock and scion].

BOYCE, A. M., KAGY, J. F., MCCALL, G. L., and LADUE, J. P. Black scale control. Summary of studies with low dosages of oil with rotenone-bearing materials. *The California Citrograph*, Los Angeles, 1940, Vol. 25, No. 10, pp. 314, 342-344.
[*Saissetia oleae*].

BROADFOOT, H. Black spot development of apples in cold storage. *The Agricultural Gazette of New South Wales*, Sydney, 1939, Vol. L, Pt. 8, pp. 445-446.
[*Venturia inaequalis*].

BRUDNAIA, A. A. Natural enemies of Bruchus pisorum L. *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 12, pp. 6-[10], figs. 1-4. [Bibliography], p. [10].
[In Russian, with title also in English].

BUA, Gaetano. Ulteriori esperimenti con sostanze attrattive per la mosca delle olive. *L'Olivicoltore*, Roma, 1940, anno XVII, n. 7, pp. [13]-21.
[*Dacus* (*Daculus*) *oleae*].

BUCHANAN, T. S. Fungi causing decay in wind-thrown northwest conifers. *Journal of Forestry*, Washington, D. C., 1940, Vol. 38, No. 3, pp. 276-281. Literature cited, p. 281.

CAMPBELL, W. A., and DAVIDSON, Ross W. Sterile conks of Polyporus glomeratus and associated cankers on beech and red maple. *Mycologia*, Lancaster, Pa., 1939, Vol. XXXI, No. 5, pp. 606-611, figs. 1-2.

CARIMINI, M. La tignola orientale del pesco. *Rivista della R. Società Toscana d'Orticultura*, Firenze, 1939, anno 64.mo, vol. XXIV, nº 3-4, pp. 64-65.
[*Cydia molesta*].

CARN, K. G. Weed control in the Western Lands Division. *The Agricultural Gazette of New South Wales*, Sydney, 1939, Vol. L, Pt. 8, pp. 421-424, 4 figs.

CARROLL, J. The incidence of eelworm pests in Eire. *Agricultural Progress*, Shrewsbury, 1939, Vol. XVI, Pt. IV, pp. 207-211.
[*Anguillulina tritici*, *A. dipsaci*, *Heterodera schachtii*, *H. marioni*, *Aphelenchoides fragariae*, *A. ritzema-bosi*].

CHAMBERLAIN, E. E. Cucumber-mosaic (*Cucumis virus* I of Smith, 1937). *The New Zealand Journal of Science and Technology*, Wellington, N. Z., 1939, Vol. XXI, No. 2 A, pp. [73 A]-90 A, figs. 1-7. References, p. 90 A.

CHAMBERLAIN, R. The chrysanthemum midge in Northern Ireland. *Agricultural Progress*, Shrewsbury, 1939, Vol. XVI, Pt. II, pp. 202-206.
[*Diarthronomyia*].

CIFERRI, R[affaele]. Le malattie della manioca (" Manihot esculenta " Crantz) in San Domingo. III. Identità e nomenclatura delle " Cercospora " viventi sulle " Manihot ". *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 99-114, figg. 1-2, tav. I-V.
[For the two previous memoirs, see this *Bulletin*, 1933, No. 11, p. 258. — *Cercospora henningsii* Allescher, *C. caribaea* Chupp et Cif.].

CIFERRI, Raffaele, [e] GADDINI, Leopoldo. Il marciume delle *Musa* da *Bacterium solanacearum* nell'oasi di Derna. *L'Agricoltura Coloniale*, Firenze, 1939, anno XXXIII, n. 9, pp. [531]-535, figg. 1-5. Letteratura citata, p. 535.

CORTES P., Raul. La arañita roja y su control. *El Agricultor del Norte*, La Serena, 1939, año 25, nº 9, págs. 218 y 219.
[*Tetranychus telarius*].

DAVIS, W. C., YOUNG, George Y., and ORR, Leslie W. Needle droop of pine. *Journal of Forestry*, Washington, D. C., 1939, Vol. 37, No. 11, pp. 884-887, fig. 1.
[This disorder appears to be the result of unfavourable factors, such as drought, heat, or frost].

DEL CAÑIZO, José. Pentatómidos perjudiciales al trigo. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 15 a 26, figs. 1-10. Bibliografía, pág. 26.
[*Aelia rostrata*, *Eurygaster* sp. nov.].

DEL CAÑIZO, José. Las plagas de langosta en España. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n.os 31, 32, 33 y 34, págs. 27 a 48, figs. 1-12.
[*Dociostaurus maroccanus, Calliptamus italicus, Pachytilus cinerascens, Oedaleus decorus, Oedipoda coerulescens, Prionotropis flexuosa*].

DELGADO DE TORRES, Demetrio. Pérdidas causadas en frutales y olivos por los insectos en España. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n.os 31, 32, 33 y 34, págs. 57 a [64].

DELGADO DE TORRES, Demetrio. Estudio económico de los tratamientos contra la mosca del olivo, *Dacus oleae* Rossi. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n.os 31, 32, 33 y 34, págs. 140 a 149.

DEPARTMENT OF HORTICULTURE AND ILLINOIS STATE NATURAL HISTORY SURVEY. Directions for spraying fruits in Illinois. *University of Illinois. College of Agriculture. Agricultural Experiment Station and Extension Service in Agriculture and Home Economics in Cooperation with the Illinois State Natural History Survey. Circular 492*, Urbana, Illinois, 1939, 32 pp., 6 figs.

DEY, P. K., and SINGH, U. B. The stem-black disease of apple in Kumaun. *The Indian Journal of Agricultural Science*, New Delhi, 1939, Vol. IX, Pt. V, pp. 703-710, pls. XXXII-XXXIII. References, p. 710.
[*Coniothecium chomatosporum*].

DOBROHLEB, J. F. Acroptilan Picris C. A. M. and measures for its control. *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 13, pp. 7-[9]. [Bibliography], p. [9].
[In Russian, with title also in English].

D'OLIVEIRA, Branquinho. Notas sobre a produção da fase aecidica de algumas ferrugens dos cereais em Portugal. *Revista Agronómica*, Lisboa, 1940, vol. XXVIII, nº 2, pags. [201]-208.
[With summary in English. — *Puccinia rubigo-vera tritici, P. rubigo-vera secalis, P. coronata avenae*].

D'OLIVEIRA, Maria de Lourdes. Os virus como parasitas. *Revista Agronómica*, Lisboa, 1940, vol. XXVIII, nº 2, pags. [188]-200. Referências bibliográficas, pags. 199-200.

DUMBLETON, L. J. Contribution to the physical ecology of *Tortrix postvittana*, Walk. (Lep.). *Bulletin of Entomological Research*, London, 1939, Vol. 30, Pt. 3, pp. 309-319, figs. 1-2.

DYKSTRA, T. P. A comparative study of American and European potato virus diseases. *American Potato Journal*, Sommerville and New Brunswick, N. J., 1939, Vol. 16, No. 11, pp. [281]-287. Literature cited, p. 287.

EL-HELALY, A. F. Studies on the control of kernel smut of sorghum. *Ministry of Agriculture, Egypt. Technical and Scientific Service. Plant Pathological Section. Bulletin No. 233*, Cairo, 1939, 22 pp., 3 figs. Literature cited, pp. 21-22.
[*Sphacelotheca sorghi*].

EL-HELALY, A. F. Further studies on the control of bean rust with some reference to the prevention of chocolate spot of beans. *Ministry of Agriculture, Egypt. Technical and Scientific Service (Plant Pathological Section). Bulletin No. 236*, Cairo, 1939, 24 pp. References, p. 24.
[*Uromyces appendiculatus, Botrytis* sp.].

ELLIOTT, Charlotte, and POOS, F. W. Seasonal development, insect vectors, and host range of bacterial wilt of sweet corn. *Journal of Agricultural Research*, Washington, D. C., 1940, Vol. 60, No. 10, pp. 645-686, figs. 1-2. Literature cited, p. 686.
[*Aplanobacter stewarti*].

ERMOLAEV, M. F. The flax pest (Thrips linarius Uzel). *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 10, pp. 33-[37], figs. 1-5.
[In Russian, with title also in English].

EVANS, J. W. A new species of *Dieuches*, Dohrn (Hem. Lygaeidae) injurious to strawberries in Tasmania. *Bulletin of Entomological Research*, London, 1939, Vol. 30, Pt. 3, pp. 305-306, fig. 1. References, p. 306.
[*D. raphaeli* n. sp. English description].

EVENDEN, James C., and GIBSON, A. L. A destructive infestation in lodgepole pine beetle. *Journal of Forestry*, Washington, D. C., 1940, Vol. 38, No. 3, pp. 271-275, figs. 1-2.
[*Dendroctonus monticolae* on *Pinus murrayana*].

FENNAH, R. G. A summary of experimental work on varietal resistence of sugarcane to *Tomaspis saccharina* 1936-39. *Tropical Agriculture*, Trinidad, B. W. I., 1939, Vol. XVI, No. 10, pp. 233-240, figs. 1-2. References, p. 240.

FIKRY, Amin. Water-table effects. IV. — Relative incidence on cucurbits. *Ministry of Agriculture, Egypt. Technical and Scientific Service (Plant Pathological Section). Bulletin No. 221*, Cairo, 1939, 9 pp., 6 figs., 13 pls. Literature cited, p. 9.
[See also this *Bulletin*, 1937, No. 10, p. 234. — *Erysiphe cichoracearum* on *Cucurbita pepo*; *Colletotrichum lagenarium* on *Citrullus vulgaris*].

FIKRY, Amin. Study and control of antirrhinum rust. *Ministry of Agriculture, Egypt. Technical and Scientific Service. Section of Plant Pathology. Bulletin No. 223*, Cairo, 1939, 16 pp., 21 pls. Literature cited, pp. 15-16.
[*Puccinia antirrhini*].

FLOR, H. H. New physiologic races of flax rust. *Journal of Agricultural Research*, Washington, D. C., 1940, Vol. 60, No. 9, pp. 575-591. Literature cited, p. 591.
[*Melampsora lini*].

FRANÇOIS, Louis. Dissémination des mauvaises herbes. *Comptes rendus hebdomadaires des séances de l'Académie d'Agriculture de France*, Paris, 1939, tome XXV, nº 24, p. 883-885.

FRANCOLINI, F. Il vaiuolo dell'olivo. La calciocianamide come mezzo di lotta. *Giornale di Agricoltura della Domenica*, Roma, 1940, anno I, n. 34, p. 292.
[*Cycloconium oleaginum*].

FRANK, A. Der Maikäferflug 1939 im Bienwald. Bericht über die Messungen des Meteorologischen Institutes der forstlichen Versuchsanstalt in München während des Maikäferfluges 1939 im Bienwald. *Forstwissenschaftliches Centralblatt*, Berlin 1939, 61. Jahrg., Heft 19-21, S. [581]-598, Abb. 1-5.
[*Melolontha*].

GADD, C. H. A virus disease of tea. *The Tea Quarterly*, St. Coombs, Talawakelle, 1939, Vol. XII, Pt. III, pp. 110-130, figs. 1-2.

GADD, C. H. A destructive root disease of tea caused by the nematode *Anguillulina pratensis*. *The Tea Quarterly*, St. Coombs, Talawakelle, 1939, Vol. XII, Pt. III, pp. 131-139, figs. 1-4. References, p. 139.

GARCÍA RADA, German. La enfermedad de la " antracnosis del mango ". *Ministerio de Fomento. Dirección de Agricultura y Ganadería. Instituto de Altos Estudios Agrícolas del Perú. Estación Experimental Agrícola de La Molina. Circular No. 50.* Lima-Perú, 1939, 7 págs., 3 figs. Literatura consultada, pág. [7].
[*Colletotrichum gloeosporioides*].

GARMENDIA, Juan Ortiz. Pérdidas en los almácigos de ají. *El Agricultor del Norte*, La Serena, 1939, año 25, nº 9, págs. 220 y 221.
[*Pythium de Baryanum*].

GARRETT, S. D. Losses to world agriculture through root disease of crops. *Chemistry & Industry*, London, 1939, Vol. 58, No. 43, pp. 953-958, 4 figs. Bibliography, p. 958.
[*Botrytis* spp., *Fusarium* spp., *Synchytrium endobioticum*, *Ophiobolus graminis*, *Armillaria mellea*, *Phymatotrichum omnivorum*, etc.]

GHIDINI, Gian Maria. Materiali per una bibliografia zoologica dell'Africa Orientale Italiana. *Rivista di Biologia Coloniale*, Roma, 1940, vol. III, fasc. IV, pp. [311]-316.
For the three preceding bibliographical lists prepared by the same author, see this *Bulletin*, 1939, No. 10, p. 246 and 1940, No. 1, p. 13, No. 5, p. 100.

GHILLINI, C. A. Cancro delle gardenie. *Rivista della R. Società Toscana d'Orticultura*, Firenze, 1939, anno 64^mo, vol. XXIV, n.° 7-8, pp. 145-149, figg. 1-5. Bibliografia, p. 149.
[*Phomopsis gardeniae*].

GIGANTE, R[oberto]. Una laciniatura delle foglie di pesco causata dal freddo. *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 125-136, figg. 1-7, tav. VII. Bibliografia, pp. 135-136.

GINAI, M. Asghar. A note on Botrytis-rot of grapes in the Quetta Valley. *The Indian Journal of Agricultural Science*, New Delhi, 1939, Vol. IX, Pt. V, pp. 719-725, fig. 1, pls. XXXV-XXXVII. References, pp. 724-725.
[*Botrytis vulgaris*].

GLÖCKNER, Günther. Untersuchungen über die " Sang "–Krankheit der Kartoffeln in Rheingau. *Angewandte Botanik*, Berlin 1940, Bd. XXII, Heft 3, S. 201-252, Abb. 1-13, Literaturverzeichnis, S. 251-252.
[*Verticillium albo-atrum* apparently associated with *Fusarium* spp. and *Botrytis cinerea*].

GOIDÀNICH, Athos. A proposito della zigena della vite (*Theresimima ampelophaga* Bayle-Barelle) in Italia. *Bollettino della Società Entomologica Italiana*, Genova, 1940, vol. LXXII, n. 1, pp. 3-9, figg. I-II. Opere consultate, pp. 8-9.

GOIDÀNICH, Gabriele. La grafiosi dell'olmo. Verso la fase risolutiva del problema. *Giornale di Agricoltura della Domenica*, Roma, 1940, anno L, n. 7, p. 51, 3 figg.
[*Graphium ulmi*].

GÓMEZ CLEMENTE, Federico. Experiencias de lucha contra la *Ceratitis capitata* con cazamoscas de vidrio. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VII-1936, n^os 31, 32, 33 y 34, págs. 99 a 117, figs. 1-3, 4 gráficos. Bibliografía, págs. 116 y 117.

GÓMEZ CLEMENTE, Federico, y GONZÁLEZ REGUERAL, Francisco. Rectificación de las tablas actualmente utilizadas en la fumigación cianhídrica de los agrios en España. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1930, vol. VIII–1936, n^os 31, 32, 33 y 34, págs. 197 a 214, figs. 1-11. Bibliografía, págs. 213 y 214.

GONTAEV, A. F. Viability of seed of clover Cuscuta isolated from manure. *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 10, pp. 29-[32].
[In Russian, with title also in English].

GONZÁLEZ DE ANDRÉS, Carlos. Las plagas del olivo en España. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n^os 31, 32, 33 y 34, págs. 118 a 124, 1 mapa. Bibliografía, págs. 123 y 124.
[*Dacus* (*Daculus*) *oleae*, *Clinodiplosis oleisuga*, *Hysteropterum grylloides*, *Euphyllura olivina*, *Saissetia oleae*, *Lepidosaphes ulmi*, *Aspidiotus hederae*, *Liothrips oleae*, *Prays oleellus*, *Phloeotribus scarabaeoides*, *Hylesinus oleiperda*].

HALL, Arthur. Catalogue of the Lepidoptera Rhopalocera (butterflies) of British Guiana. *The Agricultural Journal of British Guaiana*, Georgetown, 1939, Vol. X, No. 1, pp. [25]-41, pl. VIII; No. 2, pp. [96]-104; No. 3, pp. [146]-169.

HANNA, A. D. The pomegranate fruit butterfly, *Virachola livia* Klug. Morphology, life-history and control. *Ministry of Agriculture, Egypt. Technical and Scientific Service. Entomological Section. Bulletin No. 186*, Cairo, 1939, 54 pp., 42 figs., 4 graphs, 5 pls., 1 map. References, pp. 52-54.

HAYWARD, Kenneth J. Un plan para catalogar las varias especies de moscas dañinas a las frutas en la Argentina y establecer su dispersión geográfica como base del estudio de su control. Concertación de una acción cooperativa. *Boletín de Agricultura y Ganadería*, Córdoba, 1939, año 1939, n.º 173, págs. 8 a 10.

HENDRICKX, Fred. L. Observations sur la maladie verruqueuse des fruits du caféier. *Pubblications de l'Institut National pour l'Etude Agronomique du Congo Belge (I. N. É. A. C.). Série scientifique Nº 19*, Bruxelles, 1939, 12 p., 3 fig.
[*Botrytis cinerea* f. *coffeae* n. f.].

HENDRICKX, Fred. L. Les maladies cryptogamiques du caféier (Coffea arabica L.) au Kivu. *Annales de Gembloux*, Boitsfort, 1940, 46e année, 1re livr., p.[11]-19.

HERRICK, J. Arthur. The growth of Stereum gausapatum Fries in relation to temperature and acidity. *The Ohio Journal of Science*, Columbus, Ohio, 1939, Vol. XXXIX, No. 5, pp. 254-258. Literature cited, p. 258.

HOFMANN, Christoph. Ein neues Kontaktstäubemittel ("Nemotan") gegen Nonne und Kiefernspanner. (Vorläufige Mitteilung). *Forstarchiv*, Hannover 1940, 16. Jahrg., Heft 1, S. 8-11.
[*Lymantria monacha, Bupalus piniarius*].

HOPKINS, J. C. F. Mycological notes. 12. The Diplodia danger. *The Rhodesia Agricultural Journal*, Salisbury, 1939, Vol. XXXVI, No. 10, pp. 721-723.
[On maize].

JEFFREYS, F. J. A new pest of raspberry in New Zealand (*Priophorus tener* Zaddach). *The New Zealand Journal of Science and Technology*, Wellington, N. Z., 1939, Vol. XXI, No. 2A, pp. 107A-113A, figs. 1-8. References, p. 113A.

JEFFREYS, F. J. The raspberry-bud moth (*Carposina adreptella* Walk.). *The New Zealand Journal of Science and Technology*, Wellington, N. Z., 1939, vol. XXI, No. 2A, pp. 114A-125A, figs. 1-11. References, p. 125A.

JEPSON, W. F. Progress in parasite importation during 1938. *La Revue Agricole de l'Ile Maurice*, Maurice, 1939, nº 105, p. 82-84.
[Parasites of *Phytalus smithi*, *Aspidiotus destructor*, *Icerya seychellarum*, *Pseudococcus* spp., *Diatraea venosata*, etc.].

JONES, G. Howard. Systematic and automatic warm water steeping to control loose smut of wheat. *Ministry of Agriculture, Egypt. Technical and Scientific Service. Mycological Section. Bulletin No. 220*, Cairo, 1939, 12 pp., 10 pls. Literature cited, p. 12.
[*Ustilago tritici*].

JONES, Leon K., VINCENT, C. L., and BURK, Earl F. The resistance of progeny of Katahdin potatoes to viroses. *Journal of Agricultural Research*, Washington, D. C., 1940, Vol. 60, No. 9, pp. 631-644, figs. 1-5. Literature cited, p. 644.

KIESSELBACH, T. A., and LYNESS, W. E. The effects of stinking smut (bunt) and seed treatment upon the yield of winter wheat. *College of Agriculture. University of Nebraska. Agricultural Experiment Station. Research Bulletin 110*, Lincoln, Nebraska, 1939, 22 pp. Literature cited, p. 22.
[*Tilletia levis* and *T. tritici*].

KUMAR, L. S. S. A note on *Pennisetum typhoideum* Rich. (*bajri*) affected by *Striga densiflora* Benth. *Current Science*, Bangalore, 1939, Vol. 8, No. 8, pp. 364-365, figs. 1-2.

LARSON, R. H., and WALKER, J. C. A mosaic disease of cabbage. *Journal of Agricultural Research*, Washington, D. C., 1939, Vol. 59, No. 5, pp. 367-392, figs. 1-15. Literature cited, pp. 390-392.
[On *Brassica oleracea capitata*].

LONG, W. H., & GOODDING, L. N. Two new species of rust. *Mycologia*, Lancaster, Pa., 1939, Vol. XXXI, No. 6, pp. 670-673, fig. 1.
[*Ravenelia dysocarpae* on *Mimosa dysocarpa*; *Gymnosporangium vauqueliniae* on *Vauquelinia californica* and *Juniperus monosperma*. Latin diagnoses].

MACLEOD, G. F. A review of the potato insect problems in New York State. *American Potato Journal*, Sommerville and New Brunswick, N. J., 1939, Vol. 16, No. 9, pp. 232-236.

MALENOTTI, E[ttore]. I parassiti animali dei cereali. Roma, Ramo Editoriale degli Agricoltori, 1940, 73 pp., 23 figg., 8 tav. (Biblioteca per l'insegnamento agrario professionale. N. 98). Lire 3,50.

MALENOTTI, E[ttore]. Precisazioni sui parassiti del sorgo. *L'Industria Saccarifera Italiana*, Genova, 1940, anno XXXIII, n. 7, p. 248.

MALENOTTI, Ettore. Ancora sul sotterramento dell'esca contro le grillotalpe. *Bullettino dell'Agricoltura*, Milano, 1940, anno 74°, n. 36, p. 2.
[See also this *Bulletin*, 1940, No. 10, p. 202].

MALENOTTI, Ettore. La lotta contro gli insetti: le fumigazioni cianidriche. Come si eseguono. Le proprietà dell'acido cianidrico. Gli insetti contro i quali sono efficaci le fumigazioni. *Giornale di Agricoltura della Domenica*, Roma, 1940, anno L, n. 1, p. 3, 2 figg.

MALENOTTI, Ettore. L'agricoltura contro gli insetti. (Seconda edizione). Roma, Ramo Editoriale degli Agricoltori, 1940, 406 pp., 46 figg., 4 tav. Bibliografia, pp. [389]-406. Prezzo L. 20.
[This second edition, revised and enlarged, reviews the relations between insects and plants, insects and soil, insects and agricultural operations; in many cases, these offer possibilities of effective control, sometimes, the only means of control of the plant pests].

MANDELSON, L. F., and TOMMERUP, E. C. Yellow patch of tobacco seedlings. *Queensland Agricultural Journal*, Brisbane, 1939, Vol. LII, Pt. 3, pp. 280-294, pls. 120-124.
[A physiological disease].

MARSHALL, GUY A. K. New injurious Curculionidae from southern Africa. *Bulletin of Entomological Research*, London, 1939, Vol. 30, Pt. 3, pp. 359-363, pl. XIII.
[*Tanymecus rapax* n. sp. damaging maize seedlings in South Rhodesia; *Sciobius mordax* n. sp. damaging leaves of litchi trees in Natal; *Glyptosomus angulatus* n. sp. feeding on leaves of litchi trees in Zululand; *Lagetes edax* n. sp. damaging young pine trees in Natal; *Tanyremnus fallax* n. sp. damaging young plants of *Pinus taeda* in the Cape Province. English descriptions].

MCINTYRE, H. L. Report on forest pest problems in New York. *Journal of Forestry*, Washington, D. C., 1939, Vol. 37, No. 11, pp. 879-883.

MEHTA, P. R. A fruit rot of apples caused by a species of *Rhizopus*. *The Indian Journal of Agricultural Science*, New Delhi, 1939, Vol. IX, Pt. V, pp. 711-718, figs. 1-2, pl. XXXIV. References, p. 718.
[*Rhizopus arrhizus* ?].

MELIS, Antonio. L'estratto di semi di lupino nella lotta contro gli Afidi. *Rivista della R. Società Toscana d'Orticultura*, Firenze, 1939, anno 64.mo, vol. XXIV, nº 7-8, pp. 142-144.

MENDIZÁBAL VILLALBA, Manuel. Notas para un estudio de las especies españolas del género *Vesperus* (Col. Ceram.) *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 65 a 86, figs. 1-23. Bibliografía, págs. 82 a 86.

METCALFE, G. A bacterial disease of Forsythia. *Nature*, London, 1939, Vol. 144, No. 3660, p. 1050.
[A disease apparently caused by *Pseudomonas syringae*].

MILLER, N. C. E. A new Malayan species of *Helopeltis* (Rhynchota, Capsidae). *Bulletin of Entomological Research*, London, 1939, Vol. 30, Pt. 3, pp. 343-344, fig. 1.
[*H. theobromae* n. sp. on *Theobroma cacao* and *Bixa orellana*. English description].

MIOTTO, G. L'irrorazione meccanica ai barbatellai. *Il Gazzettino Agricolo*, Padova, 1940, anno XIII, n. 35, p. [2], 3 figg.
[Treatment of vine rooted cuttings against downy mildew (*Plasmopara viticola*)].

MO, Tjoa Tjien. Aanteekeningen over de parasieten van Hidari irava in verband met de œcologie dezer plaag. *Landbouw*, Buitenzorg 1939, XV jaarg., no 8, blz. [493]-509, 13 afb. Literatuur, blz. 506-507.
[In Dutch, with title and summary in English:— ' Notes on the parasites of Hidari irava in relation to the ecology of this pest '].

MORENO MÁRQUEZ, Victor. Los cebos envenenados contra la langosta. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, n.os 31, 32, 33 y 34, págs. 49 a 56.

MÜLLER-STOLL, Wolfgang R. Studien über Hitzebeschädigungen an Weintrauben. *Zeitschrift für Pflanzenkrankheiten (Pflanzenpathologie) und Pflanzenschutz*, Stuttgart 1939, 48. Bd., Heft 12, S. [577]- 589, Abb. 1-6. Schriftenverzeichnis, S. 589.

MUSKETT, A. E. Biological technique for the evaluation of fungicides. *Agricultural Progress*, Shrewsbury, 1939, Vol. XVI, Pt. II, pp. 212-217. References, p. 217.

NATTRASS, R. M. A new species of *Phleospora* on *Dodonaea viscosa* L. in Cyprus. *Transactions British Mycological Society*, London, 1939, Vol. XXIII, Pt. III, pp. 269-270, pl. VIII.
[*Phleospora dodonaeae* n. sp. Latin diagnosis].

NEWTON, Margaret, and JOHNSON, Thorvaldur. A mutation for pathogenicity in *Puccinia graminis Tritici*. *Canadian Journal of Research*, Ottawa, 1939, Vol. 17, Sec. C, No. 9, pp. [297]-299. References, p. 299.

NICOLAS, G[ustave], et AGGÉRY, [Berthe]. Sur la dessiccation hivernale d'origine bactérienne des feuilles de quelques plantes. *Revue Horticole*, Paris, 1939, 111e année, n. sér., tome XXVI, nº 23, p. 551-554.
[*Coccus*].

NONELL COMAS, Jaime. Introducción y difusión del *Aphelinus mali* (Hald.) en España. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 179 a 186.

OSTERWALDER, A. Kritische Betrachtungen zum Inkubationskalender für die Peronospora. *Schweizerische Zeitschrift für Obst-und Weinbau*, Wädenswil 1940, 49. Jahrg., Nr. 1, S. 3-9, Abb. 1-2.
[*Plasmopara viticola*].

OULTON, J. T. Vermin on farms. Some suggested methods of destruction. *The East African Agricultural Journal of Kenya, Tanganyika, Uganda and Zanzibar*, Amani, 1939, Vol. 5, No. 3, pp. 225-229.

OVERHOLTS, L. O. Geographical distribution of some American Polyporaceae. *Mycologia*, Lancaster, Pa., 1930, Vol. XXXI, No. 6, pp. 620-652, figs. 1-30.

PADY, S. M. Host invasion in systemic infection of Uromyces caladii. *Mycologia*, Lancaster, Pa., 1939, Vol. XXXI, No. 5, pp. 590-605, figs. 1-3. Literature cited, pp. 604-605.
[*Uromyces caladii* on *Arisaema triphyllum*].

PARISI, Ernesto. A proposito di parassiti del sorgo. *L'Industria Saccarifera Italiana*, Genova, 1940, anno XXXIII, n. 5, pp. 168-170, 3 figg.

PARSONS, F. S. Investigations on the cotton bollworm, *Heliothis armigera*, Hubn. (*obsoleta*, Fabr.). Part I. — The annual march of bollworm incidence and related factors. *Bulletin of Entomological Research*, London, 1939, Vol. 30, Pt. 3, pp. 321-338, figs. 1-5, pl. X. References, p. 337.

PERKINS, J. F. The *Ephialtes* (Hym. Ichn.) parasitising the codling moth. *Bulletin of Entomological Research*, London, 1930, Vol. 30, Pt. 3, pp. 307-308, figs. 1-4. [*E. caudata* and *E. crassiseta* as parasites of *Cydia pomonella*].

PETRI, L[ionello]. Recenti ricerche sul " mal secco " degli agrumi in Turchia. *Bollettino della R. Stazione di Patologia Vegetale* di Roma, Firenze, 1940, anno XX, n. ser., n. 2, pp. [81]-98.
Refers to the work of G. Gassner (see this *Bulletin*, 1940, Nos. 7-8, p. 151). The main results of the experiments carried out by Petri in Italy agree with those obtained by Gassner in Turkey as regards the infective and contagious nature of the disease. Petri, however, states that *Deuterophoma tracheiphila* (considered by him as the causal agent of ' mal secco ' of citrus), is not identical with *Phoma limoni* Thümen. Neither in Sicily nor in Calabria did the damage caused by cold appear to promote infection, as Gassner asserted was the case in Turkey].

PICKLES, Alan. A home-made Bordeaux-oil emulsion. *Proceedings of the Agricultural Society of Trinidad & Tobago*, Port-of-Spain, 1930, Vol. XXXIX, Pt. 4, pp. 115-116.

PLANES GARCÍA, Silverio. La tensión superficial de las emulsiones en relación con su eficacia insecticida. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs 187 a 196, figs. 1-7. Bibliografía, págs. 195 y 196.

POPOV, P. V. The chemical composition and toxicity of solutions of polysulphides of barium. *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 13, pp. 19-[25]. [Bibliography], p. [25].
In Russian, with title also in English].

PROVAGLIO, G. L'esca per combattere le grillotalpe. *Bullettino dell'Agricoltura*, Milano, 1940, anno 74°, nn. 33-34, p. [1].
In this respect, see the previous article by the same author and those of E. Malenotti (*Bulletin*, 1940, No. 9, p. 176, No. 10, p. 202 and No. 12, p. 248)].

RAMIREZ, Innocencio. *Schizophyllum commune* Fr. — a forest-products-rotting fungus. *The Philippine Journal of Forestry*, Manila, 1930, Vol. 2, No. 2, pp. 121-143, pls. 1-2. References, p. 141.

RAO, Y. Ramchandra, and GUPTA, R. L. Some notes on eye-stripes in Acrididae. *The Indian Journal of Agricultural Science*, New Delhi, 1939, Vol. IX, Pt. V, pp. 727-729. References, p. 729.

REINIGER, G. H., e GOMES, Jalmirez G. Do emprego de fungicidas com relação ao ataque de coccideos e acaros nos laranjais. *O Campo*, Rio de Janeiro, 1939, ano 10, nº 116, pags. 27-29, figs. 1-7. Bibliografia consultada, pag. 29.

RHOADS, Arthur S. The cause and control of melanose. *The Citrus Industry*, Bartow, Florida, 1940, Vol. 21, No. 6, pp. 5, 9 and 12, figs. 1-6.
[*Phomopsis citri*].

RODRÍGUEZ CASALS, Carlos. Las grandes auxiliares del agricultor. Las arañas. *Revista de Agricultura*, San José, Costa Rica, 1939, año XI, no. 8, págs. 357 a 361, fig.

RODRÍGUEZ SARDIÑA, Juan. La " grasa " de las judías (debida a *Bacterium medicaginis* var. *phaseolicola*) en España. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 231 a 264, figs. 1-12. Bibliografía, págs. 262 a 264.
[With summaries in Spanish, German and English].

RUGGIERI, G[aetano]. Il manifestarsi in natura delle infezioni di " malsecco " attraverso i " verdelli " primaverili. *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 150-155, tav. VIII.
[*Deuterophoma tracheiphila*].

RUIZ CASTRO, Aurelio, y MENDIZÁBAL, Manuel. La « roya colorada », producida por *Empoasca libyca* de Bergevin (Hem. Hom.), en los parrales de Almería. *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 150 a 161, figs. 1-9. Bibliografía, págs. 160 y 161.

RUIZ CASTRO, Aurelio. Experiencias de lucha contra el « melazo » de la parra (*Pseudococcus citri* Risso). *Boletín de Patología Vegetal y Entomología Agrícola*, Madrid, 1939, vol. VIII-1936, nos 31, 32, 33 y 34, págs. 162 a 170. Bibliografía, págs. 169 y 170.

SALAMAN, Redcliffe N., and WORTLEY, W. R. S. Potential hosts of potato viruses in garden and field. *Nature*, London, 1939, Vol. 144, No. 3660, pp. 1049-1050.

SCHREPFER, E. Selbsthergestelltes Giftgetreide zur Mäusebekämpfung. *Deutsche Landwirtschaftliche Presse*, Berlin 1939, 66. Jahrg., Nr. 39, S. 473, Abb. 591-592.

SCHULTHEISS, Fritz. Zur Bekämpfung des Kartoffelkäfers. *Deutsche Landwirtschaftliche Presse*, Berlin 1940, 67. Jahrg., Nr. 34, S. 311, Abb. 436.
[*Leptinotarsa decemlineata*].

SCHULTZ, H. Blattschäden an Spinat durch *Colletotrichum spinaciae* Ell. et Halst. *Zentralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten*, II. Abt., Jena 1939, 101. Bd., Nr. 9/13, S. 225-232, Abb. 1-7. Literaturübersicht, S. 232.

SEMENOV, A. E. The big white winged cicada, Tibicina zevara V. Kuzn., as a pest of arid agriculture. *Proceedings of the Lenin Academy of Agricultural Sciences of U. S. S. R.*, Moscow, 1940, issue 10, pp. 19-[23], figs. 1-3. [Bibliography], p. [23].
[In Russian, with title also in English].

SIBILIA, Cesare. Alcune razze fisiologiche di " Puccinia graminis tritici " Erikss. et Henn. nell'Africa orientale italiana. *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 115-118.

SIBILIA, Cesare. L'Ulmus pumila e la grafiosi. *Bollettino della R. Stazione di Patologia Vegetale* [di Roma], Firenze, 1940, anno XX, n. ser., n. 2, pp. 147-149, 1 fig.
[*Graphium ulmi*].

SIEGLER, E. A., and BOWMAN, J. J. Root responses of non-infectious hairy root apple seedlings under different methods of propagation. *Journal of Agricultural Research*, Washington, D. C., 1940, Vol. 60, No. 11, pp. 739-754, figs. 1-5. Literature cited, pp. 753-754.

SMITH, J. H. Insects and their influence on agricultural development. *The Journal of the Australian Institute of Agricultural Science*, Sydney, 1939, Vol. 5, No. 3. pp. 148-153.

SQUIRE, A. Observations on cotton stainers (*Dysdercus*) in the West Indies. *Bulletin of Entomological Research*, London, 1939, Vol. 30, Pt. 3, pp. 289-292, figs. 1-3. References, p. 292.
[*D. andreae, D. delauneyi, D. fernaldi, D. urichi, D. howardi, D. howardi* var. *minor*].

Prof. UGO PAPI, *Segretario generale dell'Istituto, Direttore responsabile.*

PRINTING OFFICE CARLO COLOMBO — ROME, DECEMBER 12, 1940.

BOOKS PRESENTED TO THE LIBRARY OF THE INTERNATIONAL INSTITUTE OF AGRICULTURE

Becker, R. Das Reichstierzuchtgesetz und seine bisherigen Auswirkungen in der rheinischen Landeszucht. Bonn, L. Leopold, 1940. XII, 195 p. (Arbeiten aus der deutschen Tierzucht, Hft. 14. Aus dem Institut für Tierzucht und Molkereiwesen der Universität Bonn).

Chapman, Paul W. Successful farming in the South. Atlanta, Ga., T. E. Smith & Co., [1939]. IX, 348 p.

Floridia, Santi. Le manne e i frassini (Fraxinus ornus – Fraxinus excelsior) dal XVI secolo av. Cr. ai nostri giorni. Messina, G. D'Anna, 1940. 118 p. (« Italiae historia œconomica »... v. 4).

Franciosa, L. L'olivo nella economia italiana. Roma, Tip. Failli, 1940. (Settore dell'olivicoltura della F. N. C. P. P. A.) v. 1.

Gossweiler, J. et F. A. Mendonça. Carta fitogeográfica de Angola; memoria descritiva dos principais tipos de vegetação da colónia determinados pelos seus aspectos fisiográficos e caracteres ecológicos segundo a nomenclatura de Rübel. [Lisboa], Edição do Govêrno geral de Angola, 1939. 242 p., (República Portuguesa. Ministerio das colónias).

Granzow, W. Das Recht der deutschen Genossenschaften; Denkschrift des Ausschusses für Genossenschaftsrecht der Akademie für deutsches Recht. Tübingen, J. C. B. Mohr, (P. Siebeck), 1940. VII, 128 p. (Arbeitsberichte der Akademie für deutsches Recht... Nr. 16.)

Hasler, H. Deutsche Gartenkunst; Entwicklung, Form und Inhalt des deutschen Gartens. Stuttgart. E. Ulmer, 1939. 299 p.

Kuster, W. Die Beschaffung von Land für Kleingärten. (Das Recht der Enteignung und Zwangspacht von Kleingartenland). Frankfurt [etc.], Trowitzsch & Sohn, [1939]. 92 p. (Das deutsche Kleingartenwesen, Hrsg.: Wilhelm Gisbertz. Hft. 5.)

Lodolini, A. La storia sociale del lavoro. Roma, Unione editoriale d'Italia, [1940]. 349 p.

Parenti, G. Prime ricerche sulla rivoluzione dei prezzi in Firenze. Firenze, C. Cya, 1939. 240, 124 p. (Pubblicazioni della R. Università degli studi di Firenze. Facoltà di economia e commercio, 16. Scuola di statistica).

Pinel, E. Elementos de agricultura indispensables para todo buen agricultor. Tegucigalpa, D. C., (Honduras), [Talleres ipograficos nacionales], 1939. v. 1. El suelo, la atmosfera, la planta]. 1939. 95 p.

Reischle, H. Die geistigen Grundlagen der Marktordnung. München, Zentralverlag der NSDAP (F. Eher), 1940. 94 p., (Parole und Tat; Schriften der « Wirtschaftspolitischen Parole ». Hft. 1)

Roenne, Klaus-Wilhelm von. Die Regelung der Bewertung des ländlichen Bodens in der Zeit vom 18. Jahrhundert bis zur Gegenwart insbesondere in Preussen; ein Vorarbeit zur Frage der rechtlichen Gestaltung der Bodenpreise. Berlin, Reichsnährstand Verlags-Ges. m. b. H., 1940. 189 p. (Beiträge zum Bauern- und Bodenrecht, hrsg. von Wilhelm Saure und Martin Busse, Bd. 13.)

Schrewe, E. Die Anpassungsfähigkeit der Landwirtschaft an wirtschaftliche Veränderungen. Jena, G. Fischer, 1940. VII, 156 p.

Willis, L. G. Bibliography of references to the literature on the minor elements and their relation to plant and animal nutrition. 3rd ed. [New York, Chilean nitrate educational bureau, 1939]. [3], 488 p. [With: Botanical index. 1940. 24 p. First supplement. [1940]. 82 p.]

Wolf, H. Das deutsche graubraune Höhenvieh. Berlin, Deutsche Gesellschaft für Züchtungskunde, 1940. 19 p. (Aus deutschen Zuchten. Neue Schriftenreihe hrsg. von der Deutschen Gesellschaft für Züchtungskunde, Hft. 9.)

Yougoslavie, Lois, codes, etc. Gesetz über die Wirtschaftsgenossenschaften. Novi Sad, Druckerei- und Verlags-Aktiengesellschaft, [1938]. 79 p.

Zanutto, S. Saggio di bibliografia giuridico-agraria coloniale: anni 1937, 1938, 1939. Roma, Edizioni universitarie, 1940. 56 p. (Roma, Osservatorio italiano di diritto agrario. [Pubblicazioni], 2.)

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